

TRANSLATION

10/556547

(Amendment under Art.34)

PCT/CN2004/000469

Claims

1. A scroll comprising an orbiting spiral and a stationary spiral each composed of a spiral body and a corresponding base plate, characterized by using of elastic or plastic material, or elastic and plastic material for making either or both the spirals, and making use of the elasticity or plasticity of such material to decrease the unevenness of the contact surface of these two spirals and increase the contact surface area by deformation of the material caused by squeezing upon orbiting of the orbiting spiral around the stationary spiral so as to provide a sealing effect between two contact surfaces of these two spirals and a mutual axial and radial compensating effect during orbiting.
2. The scroll as claimed in Claim 1 wherein either or both of the orbiting spiral and the stationary spiral are made of elastic or/and plastic material.
3. The scroll as claimed in Claim 1 wherein the elastic or plastic material is polytetrafluoroethylene, polyurethane or synthetic rubber.
4. The scroll as claimed in Claim 1 wherein the surface of the frame of either or both of the orbiting spiral and the stationary spiral is coated with elastic or/and plastic coating material.
5. The scroll as claimed in Claim 4 wherein the frames of the orbiting spiral and the stationary spiral are formed with a plurality of through or blind pores to increase the bond strength of the said coating material.
6. A scroll manufacture method characterized by the following steps:
 - making spiral bodies with sheet;
 - fixing each spiral body to a metal base plate; and
 - coating the outer surface of each spiral body and the bottom of each metal base plate contacting with the spiral body with an elastic material, or forming thereon a plastic layer by molding.
7. The scroll manufacture method as claimed in Claim 6 wherein the said sheet is formed with a plurality of pores.
8. The scroll manufacture method as claimed in Claim 6 wherein the said sheet is a metal or plastic sheet.
9. The scroll manufacture method as claimed in Claim 6 wherein said elastic material is either polytetrafluoroethylene, or polyurethane or synthetic rubber.
10. A scroll manufacture method characterized by the following steps:
 - coating the sheet with elastic material; then
 - making spiral bodies; and

- fixing each spiral body to a metal base plate.

11. The scroll manufacture method as claimed in Claim 10 wherein said sheet is formed with a plurality of pores.

12. The scroll manufacture method as claimed in Claim 10 wherein said sheet is a metal or plastic sheet.

13. The scroll manufacture method as claimed in Claim 10 wherein said elastic material is either polytetrafluoroethylene, or polyurethane or synthetic rubber.

14. A scroll manufacture method characterized by the following steps:

- Forming of a frame for spiral body on each metal base plate by molding; and

- Coating the frame and the metal base plate with elastic material, or forming thereon a plastic layer by molding.

15. The scroll manufacture method as claimed in Claim 14 wherein the metal base plate and the frame for the spiral body are formed as an integrated part by molding.

16. The scroll manufacture method as claimed in Claim 14 wherein the said elastic material is either polytetrafluoroethylene, or polyurethane or synthetic rubber.

17. A scroll manufacture method characterized by forming of the scroll on the metal base plate with elastic material by molding.

18. The scroll manufacture method as claimed in Claim 17 wherein the said elastic material is either polytetrafluoroethylene, or polyurethane or synthetic rubber.